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TO: Commissioner for Patents
Attn: Theresa Doan
Patent Examining Corps
Facsimile Center
P.O. Box 1450
Alexandria, VA 22313-1450

FROM: Eric H. Olson

OUR REF: 303.355US4

TELEPHONE: 612-371-2131

FAX NUMBER 703-522-0200 872-9306

* Please deliver to Examiner Theresa Doan in Art Unit 2814. *

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In re. Patent Application of: Leonard Forbes et al.

Examiner: Theresa Doan

Serial No.: 09/883,795

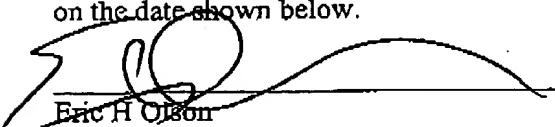
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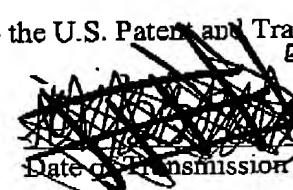
Filed: June 18, 2001

Docket No.: 303.355US4

Title: METHOD OF FORMING A DEVICE WITH A GALLIUM NITRIDE OR GALLIUM ALUMINUM NITRIDE GATE

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PATENT

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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant:	Leonard Forbes et al.	Examiner:	Unknown
Serial No.:	Unknown	Group Art Unit:	Unknown
Filed:	Herewith	Docket:	303.355USA4
Title:	DEAPROM AND TRANSISTOR WITH GALLIUM NITRIDE OR GALLIUM ALUMINUM NITRIDE GATE		

INFORMATION DISCLOSURE STATEMENT

Commissioner for Patents
Washington, D.C. 20231

In compliance with the duty imposed by 37 C.F.R. § 1.56, and in accordance with 37 C.F.R. §§ 1.97 *et. seq.*, the enclosed materials are brought to the attention of the Examiner for review in connection with the above-identified patent application. Pursuant to the provisions of MPEP 609, Applicants request that a copy of the 1449 form, initialed as being considered by the Examiner be returned to the Applicants.

In accordance with 37 C.F.R. § 1.98(d), copies of the listed documents are not provided as these references were previously cited by or submitted to the U.S. Patent Office in connection with Applicants' prior U.S. application, Serial No. 09/141,392, filed on August 27, 1998, which is relied upon for an earlier filing date under 35 U.S.C. §120.

Applicants respectfully request consideration of these references during prosecution of the above-identified matter. The Examiner is invited to contact the Applicants' Representative at the below-listed telephone number if there are any questions regarding this communication.

Respectfully submitted,

LEONARD FORBES ET AL.

By their Representatives,

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Date 18 JUNE 2001 By Robert E. Mates

Robert E. Mates
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This paper or fee is being deposited on the date indicated above with the United States Postal Service pursuant to 37 CFR 1.10, and is addressed to the Commissioner for Patents, Box Patent Application, Washington, D.C. 20231.

Sheet 1 of 11

Form 1449 ^a INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Use several sheets if necessary)	Atty. Docket No.: 303.355US4	Serial No. Unknown
	Applicant: Leonard Forbes et al.	
	Filing Date: Herewith	Group: Unknown

U.S. PATENT DOCUMENTS

Examiner Initial	Document Number	Date	Name	Class	Subclass	Filing Date if Appropriate
	4,113,515	09/12/1978	Kooi, E., et al.	148	1.5	03/29/76
	4,460,670	07/01/1984	Ogawa, et al.	430	57	11/19/82
	4,462,150	07/31/1984	Nishimura, H., et al.	29	576 B	09/16/82
	4,507,673	03/26/1985	Aoyama, M., et al.	357	23 R	09/21/83
	4,657,699	04/01/1987	Nair	252	513	12/17/84
	4,738,729	04/01/1998	Yoshida, et al.	136	258	01/27/87
	4,768,072	08/30/1988	Seki, Y., et al.	357	29	10/02/86
	4,769,686	09/06/1988	Horiuchi, M., et al.	357	23.8	06/19/87
	4,841,349	06/20/1989	Nakano, M.	357	30	10/28/87
	4,849,797	07/18/1989	Ukai, Y., et al.	357	237	01/20/88
	4,893,273	01/09/1990	Usami	365	185	03/21/86
	5,049,950	09/17/1991	Fujii, Y., et al.	357	2	08/09/90
	5,111,430	05/05/1992	Moxie	365	185	06/21/90
	5,145,741	09/01/1992	Quick	428	402	02/28/91
	5,235,195	08/10/1993	Tran, N.T., et al.	257	59	10/19/92
	5,260,593	11/09/1993	Lee, R.R.	257	316	12/10/91
	5,293,560	03/08/1994	Harari, E.	365	185	11/03/92
	5,298,796	03/29/1994	Tawel, R.	307	201	07/08/92
	5,317,535	05/31/1994	Talreja, S.S., et al.	365	185	06/19/92
	5,369,040	11/29/1994	Halvis, et al.	437	3	04/12/93
	5,371,383	12/06/1994	Miyata, K., et al.	257	77	05/14/93
	5,388,069	02/07/1995	Kokubo, M.	365	185	03/18/93
	5,407,845	04/18/1995	Nasu, Y., et al.	437	40	10/13/93
	5,415,126	05/16/1995	Loboda, M.J., et al.	117	88	08/16/93
	5,424,993	06/13/1995	Lee, R.R., et al.	365	218	11/15/93
	5,438,544	08/01/1995	Makino, T.	365	185	01/28/94
	5,449,941	09/12/1995	Yamazaki, S., et al.	257	411	10/27/92
	5,455,432	10/03/1995	Hartsell, M.L., et al.	257	77	10/11/94
	5,465,249	11/07/1995	Cooper, et al.	365	149	11/26/91
	5,467,306	11/14/1995	Kaya, C., et al.	365	185.2	10/04/93
	5,477,485	12/19/1995	Bergemont, et al.	365	185.24	02/22/95
	5,493,140	02/20/1996	Iguchi, K.	257	316	06/21/94
	5,508,543	04/16/1996	Hartstein, A.M., et al.	257	314	04/29/94
	5,530,581	06/25/1996	Cogan	359	265	05/31/95
	5,557,114	09/17/1996	Leas, J.M., et al.	257	59	01/12/95
	5,562,769	10/08/1996	Dreifus, D.L., et al.	117	86	02/22/95
	5,580,380	12/03/1996	Liu, et al.	117	86	01/30/95
	5,604,357	02/18/1997	Hori, T.	257	24	07/11/95
	5,623,442	04/22/1997	Gotou, H., et al.	365	185.08	06/08/94
	5,629,222	05/13/1997	Yamazaki, S., et al.	438	259	04/28/95
	5,654,206	08/05/1997	Harris, C., et al.	438	522	05/08/95

Examiner _____ Date Considered _____

^aSubstitute Disclosure Statement Form (PTO-1449)

**EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Enclose copy of this form with next communication to applicant.

Sheet 2 of 11

Form 1449*	Atty. Docket No.: 303,355US4	Serial No. Unknown
	Applicant: Leonard Forbes et al.	
	Filing Date: Herewith	Group: Unknown
INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Use several sheets if necessary)		

U.S. PATENT DOCUMENTS

**Examiner Initial	Document Number	Date	Name	Class	Subclass	Filing Date If Appropriate
	5,670,790	09/23/1997	Katoh, et al.	257	14	09/19/96
	5,714,766	02/03/1998	Chen, et al.	257	20	09/29/95
	5,719,410	02/17/1998	Suehiro, S., et al.	257	77	12/16/96
	5,740,104	04/14/1998	Forbes, L.	365	185.03	01/29/97
	5,754,477	05/19/1998	Forbes, L.	365	185.33	01/29/97
	5,786,250	07/28/1998	Wu, Z., et al.	438	254	03/14/97
	5,789,276	08/04/1998	Leas, J.M., et al.	438	59	12/08/95
	5,801,401	09/01/1998	Forbes, L.	257	77	01/29/97
	5,846,859	12/08/1998	Lee, S.	438	253	02/23/96
	5,858,811	01/12/1999	Tohyama, S.	438	75	01/15/97
	5,877,041	03/02/1999	Fuller, R.T.	438	105	06/30/97
	5,886,368	03/23/1999	Forbes, L., et al.	257	77	07/29/97
	5,886,379	03/23/1999	Jeong, H.	257	319	01/27/97
	5,898,197	04/27/1999	Fujiwara, H.	257	317	06/03/97
	5,907,775	05/25/1999	Tseng, H.	438	261	04/11/97
	5,912,837	06/15/1999	Lakhani, V.	365	185.02	10/28/96
	6,018,165	01/25/2000	Lin, K., et al.	257	22	07/30/98
	6,031,263	02/29/2000	Forbes, L., et al.	257	315	07/29/97
	6,034,001	03/07/2000	Shor, J.S., et al.	438	931	02/17/94
	6,075,259	06/13/2000	Baliga, B.J.	257	77	07/13/99
	6,144,581	11/07/2000	Diorio, C.J., et al.	365	185.03	11/30/98
	6,163,066	12/19/2000	Forbes, L., et al.	257	632	08/24/98
	6,166,401	12/26/2000	Forbes, L.	257	77	08/20/98

FOREIGN PATENT DOCUMENTS

**Examiner Initial	Document Number	Date	Country	Class	Subclass	Translation Yes No
	01-115162	05/08/1989	Japan	H01L	29/78	
	0291951	08/04/1993	European	H01L	29/64	
	03-222367	10/01/1991	Japan	H01L	29/784	
	04-056769	02/24/1992	Japan	C23C	16/32	
	06-224431	08/12/1994	Japan	H01L	29/784	
	06-302828	10/28/1994	Japan	H01L	29/788	
	0681333	11/08/1995	European	H01L	29/788	
	07-115191	05/02/1995	Japan	H01L	29/78	
	07-226507	08/22/1995	Japan	H01L	29/78	
	08-255878	10/01/1996	Japan	H01L	27/10	
	08-255878-TR	10/01/1996	Japan	H01L	27/10	
	60-024678	02/07/1985	Japan	G06K	9/36	
	60-184681	09/20/1985	Japan	C23C	16/30	
	60-242678	12/02/1985	Japan	H01L	29/73	
	62-122275	06/03/1987	Japan	H01L	27/78	

Examiner	Date Considered

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Sheet 3 of 11

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FOREIGN PATENT DOCUMENTS

Examiner				Translation	
Initials	Examiner Number	Date	Country	Class	Subclass
	63-181473	07/26/1988	Japan	H01L	29/78
	63-219172	09/12/1988	Japan	H01L	29/78
	63-289960	11/28/1988	Japan	H01L	29/64

OTHER DOCUMENTS

(Including Author, Title, Date, Pertinent Page, Etc.)

Examiner Initials	Akasaki, I., et al., "Effects of AlN Buffer Layer on Crystallographic Structure and on Electrical and Optical Properties of GaN and Ga(1-x)Al(x)N [0 < x (< or =) 0.4] Films Grown on Sapphire Substrate by MOVPE", <u>J. Crystal Growth</u> , 98, 209-219, (1989)
	Alok, D., et al., "Electrical Properties of Thermal Oxide Grown on N-type 6H-Silicon Carbide", <u>Applied Physics Letters</u> , 64, 2845-2846, (May 23, 1994)
	Andrieux, M., et al., "Interface and Adhesion of PACVD SiC Based Films on Metals", <u>Suppl. Le Vide: science, techniques et applications</u> , 279, 212-214, (1996)
	Bachmann, P., et al., "Influence on Surface Modifications on the Electronic Properties of CVD Diamond Films", <u>Diamond and Related Materials</u> , 5, 1378-1383, (1996)
	Baglee, D., "Characteristics & Reliability of 100 Angstrom Oxides", <u>IEEE 22nd Annual Proc. Reliability Physics</u> , Las Vegas, 152-155, (April 3-5, 1984)
	Beheim, G., et al., "Magnetron Plasma Etching of SiC for Microstructures", <u>Proc. SPIE - Integrated Optics and Microstructures III</u> , San Jose, CA, 82-86, (Jan 29, 1996)
	Beltzam, F., et al., "GaAlAs/GaAs Floating-Gate Memory Devices with Graded-Gap Injector Grown by Molecular-Beam Epitaxy", <u>IEEE Transactions on Electron Devices</u> , 35, Abstract No. VA-7, 2451, (Dec. 1988)
	Bengtsson, S., et al., "Applications of Aluminum Nitride Films Deposited by Reactive Sputtering to Silicon-On-Insulator Materials", <u>Japanese J. Applied Physics</u> , 35, 4175-4181, (1996)
	Benjamin, M., et al., "UV Photoemission Study of Heteroepitaxial AlGaN Films Grown on 6H-SiC", <u>Applied Surface Science</u> , 104/105, 455-460, (1996)
	Bermudez, V., et al., "The Growth and Properties of Al and AlN Films on GaN(0001)-(1 x 1)", <u>J. Applied Physics</u> , 79, 110-119, (Jan. 1996)

Examiner _____ Date Considered _____

*Substitute Disclosure Statement Form (PTO-1449)

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OTHER DOCUMENTS

(Including Author, Title, Date, Pertinent Pages, Etc.)

Examiner Initials	
	Boeringer, D.W., et al., "Avalanche amplification of multiple resonant tunneling through parallel silicon microcrystallites", <u>Physical Rev. B</u> , <u>51</u> , 13337-13343, (1995)
	Casey, H., et al., "Low Interface Trap Density for Remote Plasma Deposited SiO ₂ on n-type GaN", <u>Applied Phys. Lett.</u> , <u>68</u> , 1850-1852, (March 1996)
	Chang, C., et al., "Novel Passivation Dielectrics-The Boron- or Phosphorus-Doped Hydrogenated Amorphous Silicon Carbide Films", <u>Journal of the Electrochemical Society</u> , <u>132</u> , 418-422, (Feb. 1985)
	Choi, J., et al., "Effect of Deposition Conditions and Pretreatments on the Microstructure of MPECVD Diamond Thin Films", <u>Materials Chemistry and Physics</u> , <u>45</u> , 176-179, (1996)
	Clarke, G., et al., "The Infrared Properties of Magnetron-Sputtered Diamond-Like Thin Films", <u>Thin Solid Films</u> , <u>280</u> , 130-135, (1996)
	Compagnini, G., et al., "Spectroscopic Characterization of Annealed Si(1-x)C(x) Films", <u>J. Materials Res.</u> , <u>11</u> , 2269-2273, (Sept. 1996)
	Bartnell, N., et al., "Reactive Ion Etching of Silicon Carbide (Si(x)C(1-x))", <u>Vacuum</u> , <u>46</u> , 349-355, (1995)
	Demichelis, F., et al., "Influence of Doping on the Structural and Optoelectronic Properties of Amorphous and Microcrystalline Silicon Carbide", <u>Journal of Applied Physics</u> , <u>72</u> , 1327-1333, (Aug. 15, 1992)
	Demichelis, F., et al., "Physical Properties of Undoped and Doped Microcrystalline SiC:H Deposited By PECVD", <u>Materials Research Society Symposium Proceedings</u> , <u>219</u> , Anaheim, CA, 413-418, (4/30 - 5/1, 1991)
	Dipert, B., et al., "Flash Memory Goes Mainstream", <u>IEEE Spectrum</u> , <u>30</u> , 48-52, (October 1993)
	Edelberg, B., et al., "Visible Luminescence from Nanocrystalline silicon films produced by plasma enhanced chemical vapor deposition", <u>Appl. Phys. Lett.</u> , <u>68</u> , 1415-1417, (1996)
	Fissel, A., et al., "Epitaxial Growth of SiC Thin Films on Si-stabilized alpha-SiC (0001) at Low Temperatures by Solid-source Molecular Beam Epitaxy", <u>Journal of Crystal Growth</u> , <u>154</u> , 72-80, (1995)

Examiner

Date Considered

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Sheet 5 of 11

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INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Use several sheets if necessary)		

OTHER DOCUMENTS

(Including Author, Title, Date, Pertinent Pages, etc.)

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Friedrichs, P., et al., "Interface Properties of Metal-Oxide-Semiconductor Structures on N-Type 6H and 4H-SiC", <u>J. Applied Physics</u> , 79, 7814-7819, (May 15, 1996)	
Fujii, T., et al., "Bonding Structures in Highly Photoconductive a-SiC:H Films Deposited by Hybrid-Plasma Chemical Vapor Deposition", <u>Journal of Non-Crystalline Solids</u> , 198-200, 577-581, (1996)	
Goetzberger, A., et al., <u>Applied Solid State Science: Advances in Materials and Device Research</u> , R. Wolfe, ed., Academic Press, New York, Including pg. 233, (1969)	
Graul, J., et al., "Growth Mechanism of Polycrystalline beta-SiC Layers on Silicon Substrate", <u>Applied Phys. Lett.</u> , 21, 67-69, (July 1972)	
Hamakawa, Y., et al., "Optoelectronics and Photovoltaic Applications of Microcrystalline SiC", <u>Materials Research Society Symposium Proceedings</u> , 164, Boston, MA, 291-301, (11/29-12/1, 1989)	
He, Z., et al., "Ion-beam-assisted Deposition of Si-carbide Films", <u>Thin Solid Films</u> , 260, 32-37, (1995)	
Hu, G., et al., "Will Flash Memory Replace Hard Disk Drive?", <u>1994 IEEE International Electron Device Meeting</u> , Panel Discussion, Session 24, Outline, 2 pages, (Dec. 1994)	
Hwang, J., et al., "High Mobility beta-SiC Epilayer Prepared by Low-pressure Rapid Thermal Chemical vapor Deposition on a (100) Silicon Substrate", <u>Thin Solid Films</u> , 272, 4-6, (1996)	
Hybertsen, M.S., "Absorption and Emission of Light in Nanoscale Silicon Structures", <u>Phys. Rev. Lett.</u> , 72, 1514-1517, (1994)	
Jou, S., et al., "Electron Emission Characterization of Diamond Thin Films Grown from a Solid Carbon Source", <u>Thin Solid Films</u> , 280, 256-261, (1996)	
Kato, M., et al., "Read-Disturb Degradation Mechanism due to Electron Trapping in the Tunnel Oxide for Low-voltage Flash Memories", <u>IEEE Electron Device Meeting</u> , 45-48, (1994)	
Kothandaraman, M., et al., "Reactive Ion Etching of Trenches in 6H-SiC", <u>J. Electronic Materials</u> , 25, 875-878, (1996)	

Examiner

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OTHER DOCUMENTS

(including Author, Title, Date, Pertinent Pages, Etc.)

**Examiner
Initials

Kumbhar, A., et al., "Growth of Clean Amorphous Silicon-Carbon Alloy Films by Hot-Filament Assisted Chemical Vapor Deposition Technique", <u>Applied Phys. Lett.</u> , 65, 1741-1743, (April 1995)	
Lakshmi, Z., et al., "Interface-State Characteristics of GaN/GaAs MIS Capacitors", <u>Solid-State Electronics</u> , 25, 811-815, (1982)	
Lanois, F., et al., "Angle Etch Control for Silicon Carbide Power Devices", <u>Applied Phys. Lett.</u> , 69, 236-238, (July 1996)	
Lau, S., et al., "Optoelectronic Properties of Highly Conductive Microcrystalline SiC Produced by Laser Crystallization of Amorphous SiC", <u>J. of Non-Crystalline Solids</u> , 198-200, 907-910, (1996)	
Leggieri, G., et al., "Laser Ablation Deposition of Silicon Carbide Films", <u>Applied Surface Science</u> , 96-98, 866-869, (1996)	
Lei, T., et al., "Epitaxial Growth and Characterization of Zinc-Blende Gallium Nitride on (001) Silicon", <u>J. Appl. Phys.</u> , 71, 4933-4943, (May 1992)	
Lin, B., et al., "Dramatic Reduction of Sidegating in MODFET's", <u>IEEE Transactions on Electron Devices</u> , 35, Abstract No. VA-6, pg. 2451, (1988)	
Liu, J., et al., "Formation of SiC Films on Silicon Field Emitters", <u>Materials Res. Soc. Symp. Proc.</u> , 311, San Francisco, CA, (April 13-15, 1993)	
Liu, J., et al., "Modification of Si Field Emitter Surfaces by Chemical Conversion to SiC", <u>J. Vac. Sci. Technol.</u> , B 12, 717-721, (1994)	
Lott, J.A., et al., "Charge Storage in InAlAs/InGaAs/InP Floating Gate Heterostructures", <u>Electronics Letters</u> , 26, 972-973, (July 5, 1990)	
Luo, J., et al., "Localized Epitaxial Growth of Hexagonal and Cubic SiC Films on Si by Vacuum Annealing", <u>Applied Phys. Lett.</u> , 69, 916-918, (Aug. 1996)	
Martins, R., et al., "Transport Properties of Doped Silicon Oxycarbide Microcrystalline Films Produced by Spatial Separation Techniques", <u>Solar Energy Materials and Solar Cells</u> , 41-42, 493-517, (1996)	
Martins, R., et al., "Wide Band Gap Microcrystalline Silicon Thin Films", <u>Diffusion and Defect Data : Solid State Phenomena</u> , 44-46, Part 1, Scitec Publications, 299-346, (1995)	

Examiner

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OTHER DOCUMENTS

(Including Author, Title, Date, Pertinent Pages, Etc.)

**Examiner
Initial

Mauri, F., et al., "Chemical Vapor Co-Deposition of C and SiC at Moderate Temperature for the Synthesis of Compositonally Modulated Si(x)C(1-x) Ceramic Layers", <u>Surface and Coatings Technology</u> , 76-77, 119-125, (1995)
McLane, G., et al., "High Etch Rates of SiC in Magnetron Enhanced SF(6) Plasmas", <u>Applied Phys. Lett.</u> , 68, 3755-3757, (June 1996)
Mogab, C., et al., "Conversion of Si to Epitaxial SiC by Reaction with C(2)H(2)", <u>J. Applied Physics</u> , 45, 1075-1084, (March 1974)
Mohammad, S.N., et al., "Emerging Gallium Nitride Based Devices", <u>Proceedings of the IEEE</u> , 83, 1306-1355, (Oct. 1995)
Molnar, R., et al., "Growth of Gallium Nitride by Electron-Cyclotron Resonance Plasma-Assisted Molecular-Beam Epitaxy: The Role of Charged Species", <u>J. Appl. Phys.</u> , 76, 4587-4595, (1994)
Muller, K., et al., "Trench Storage Node Technology for Gigabit DRAM Generations", <u>Digest IEEE International Electron Devices Meeting</u> , San Francisco, CA, 507-510, (Dec. 1996)
Nemanich, R., et al., "Diamond Negative Electron Affinity Surfaces, Structures and Devices", <u>Proc. : Third International Conference on Applications of Diamond Films and Related Materials</u> , 1, Gaithersburg, MD, 17-24, (1995)
Nemanich, R., et al., "Negative Electron Affinity Surfaces of Aluminum Nitride and Diamond", <u>Diamond and Related Materials</u> , 5, 790-796, (1996)
Ouyang, M., et al., "Deposition of Diamond-Like Carbon Films via Excimer Laser Ablation of Polybutadiene", <u>Materials Science and Engineering</u> , B39, 228-231, (1996)
Pankove, J., "Photoelectric Emission", <u>In: Optical Processes in Semiconductors</u> , Dover Publications Inc., New York, 287-301, (1971)
Pankove, J., et al., "Photoemission from GaN", <u>Applied Phys. Lett.</u> , 25, 53-55, (1974)
Papadas, C., et al., "Modeling of the Intrinsic Retention Characteristics of PLATOX EEPROM Cells Under Elevated Temperature Conditions", <u>IEEE Transaction on Electron Devices</u> , 42, 678-682, (April 1995)

Examiner

Date Considered

*Substitute Disclosure Statement Form (PTO-1449)

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OTHER DOCUMENTS**Examiner
Initial

(Ocluding Author, Title, Date, Permanent Pages, Etc.)

Patuwathavithane, C., et al., "Oxidation Studies for 6H-SiC", <u>Proc: 4th Int. Conf. on Amorphous and Crystalline Silicon Carbide IV</u> , Santa Clara, CA, 163-169, (Oct. 9-11, 1991)	
Pereyra, I., et al., "Wide Gap α -Si $(1-x)$ C (x) : H Thin Films Obtained Under Starving Plasma Deposition Conditions", <u>J. Non-Crystalline Solids</u> , 201, 110-118, (1996)	
Pollack, S., "Electron Transport Through Insulating Thin Films", <u>Appl. Solid-State Science</u> , 1, 345-355, (1969)	
Prendergast, J., "FLASH or DRAM: Memory Choice for the Future", <u>IEEE Electron Device Meeting, Session 25</u> , Phoenix, AZ, (1995)	
Rahman, M., et al., "Preparation and Electrical Properties of An Amorphous SiC/ Crystalline Si p(+)-n Heterostructure", <u>Japanese J. Applied Physics</u> , 23, 515-524, (May 1984)	
Renlund, G., et al., "Silicon Oxycarbide Glasses: Part I. Preparation and Chemistry", <u>Journal of Materials Research</u> , 6, 2716-2722, (December 1991)	
Renlund, G., et al., "Silicon Oxycarbide Glasses: Part II. Structure and Properties", <u>Journal of Materials Research</u> , 6, 2723-2734, (December 1991)	
Sakata, I., et al., "Amorphous Silicon/Amorphous Silicon Carbide Heterojunctions Applied to Memory Device Structures", <u>Electronics Letters</u> , 30(9), 688-689, (1994)	
Schmidt, I., et al., "Low Temperature Diamond Growth Using Fluorinated Hydrocarbons", <u>Diamond and Related Materials</u> , 5, 1318-1322, (1996)	
Schoenfeld, O., et al., "Formation of Si Quantum dots in Nanocrystalline silicon", <u>Proc. 7th Int. Conf. on Modulated Semiconductor Structures, Madrid</u> , 605-608, (1995)	
Serre, C., et al., "Ion-Beam Synthesis of Amorphous SiC Films: Structural Analysis and Recrystallization", <u>J. Appl. Phys.</u> , 79, 6907-6913, (May 1996)	
Sim, S., et al., "A New Planar Stacked Technology (PST) for Scaled and Embedded DRAMs", <u>Digest IEEE Int. Electron Devices Meeting</u> , San Francisco, CA, S04-507, (Dec. 1996)	

Examiner

Date Considered

*Substitute Disclosure Statement Form (FD-1449)

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	Applicant: Leonard Forbes et al.	
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OTHER DOCUMENTS

(Including Author, Title, Date, Pertinent Pages, Etc.)

	Suzaki, Y., et al., "Quantum Size Effects of a-Si(:H)/a-SiC(:H) Multilayer Films Prepared by rf Sputtering", <u>Abstracts of Papers Published in the Int. J. Japenese Soc. for Precision Engineering</u> , 28, Abstract of Paper in vol. 60, 182, (June 1994)
	Svirkova, N., et al., "Deposition Conditions and Density-of-States Spectrum of a-Si(1-x)C(x) :H Films Obtained by Sputtering", <u>Semiconductors</u> , 28, 1164-1169, (Dec. 1994)
	Sze, S., <u>Physics of Semiconductors</u> , 2nd Edition., John Wiley & Sons, Pub., New York, ISBN 0471056618, (1981)
	Sze, S.M., <u>In: Physics of Semiconductor Devices</u> , Wiley-Interscience, New York, p. 496-497, (1969)
	Tarui, Y., "Flash Memory Features Simple Structure, Superior Integration", <u>IEEE</u> , 30, 84-87, (Sept. 1993)
	Tenhoover, M., et al., "DC-Magnetron Sputtered Silicon Carbide", <u>Materials Res. Soc. Symp. Proc.</u> , 356, Boston, MA, 227-232, (11/28-12/02, 1994)
	Thomas, J., et al., "Plasma Etching and Surface Analysis of a-SiC :H Films Deposited by Low Temperature Plasma Enhanced Chemical Vapor Deposition", <u>Materials Res. Soc. Symp. Proc.</u> , 334, Boston, MA, 445-450, (11/29-12/02, 1993)
	Tiwari, S., et al., "A silicon nanocrystal based memory", <u>Appl. Physics Lett.</u> , 68, 1377-1379, (1996)
	Tiwari, S., et al., "Volatile and Non-Volatile Memories in Silicon with Nano-Crystal Storage", <u>Int'l Electron Devices Meeting: Technical Digest</u> , Washington, DC, 521-524, (Dec. 1995)
	Tsu, R., et al., "Slow Conductance oscillations in nanoscale silicon clusters of quantum dots", <u>Appl. Phys. Lett.</u> , 65, 842-844, (1994)
	Tsu, R., et al., "Tunneling in Nanoscale Silicon Particles Embedded in an a-SiO ₂ Matrix", <u>Abstract, IEEE Device Research Conference</u> , pp. 178-179, (1996)
	Tucker, C., et al., "Ion-beam-assisted Deposition of Nonhydrogenated a-Si:C Films", <u>Can. J. Physics</u> , 74, 97-101, (1996)

Examiner

Date Considered

*Substitute Disclosure Statement Form (PTO 1449)

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	Filing Date: Herewith	Group: Unknown

OTHER DOCUMENTS**Examiner
Initial

(including Author, Title, Date, Page, etc.)

van der Waide, J., et al., "Negative-electron-affinity Effects on the Diamond (100) Surface", <u>Physical Review B [Condensed Matter]</u> , 50, 5803-5806, (Aug. 15, 1994)
Vodakov, Y., et al., "Diffusion and Solubility of Impurities in Silicon Carbide", In: <u>Silicon Carbide</u> , R.C. Marshall, et al., eds., Univ. of South Carolina Press, 508-519, (1973)
Wahab, Q., et al., "3C-SiC / Si / 3C-SiC Epitaxial Trilayer Films Deposited on Si (111) Substrates by Reactive Magnetron Sputtering", <u>J. Materials Res.</u> , 10, 1349-1351, (June 1995)
Watanabe, A., et al., "SiC Thin Film Preparation by ArF Excimer Laser Chemical Vapor Deposition. Part 1: Rate of Photolysis of Alkylsilanes by ArF Excimer Laser and their Decomposition Products", <u>Thin Solid Films</u> , 274, 70-75, (1996)
Wolter, S., et al., "Textured Growth of Diamond on Silicon via in situ Carburization and Bias-Enhanced Nucleation", <u>Appl. Phys. Lett.</u> , 62, 1215-1217, (March 1993)
Wu, K., et al., "The Growth and Characterization of Silicon/Silicon Carbide Heteroepitaxial Films on Silicon Substrates by Rapid Thermal Chemical Vapor Deposition", <u>Japanese J. Appl. Phys.</u> , 35, 3836-3840, (1996)
Yamaguchi, Y., et al., "Properties of Heteroepitaxial 3C-SiC Films Grown by LPCVD", <u>Digest of Tech. Papers: 8th Int. Conf. on Solid-State Sensors and Actuators and Eurosensors IX</u> , vol. 2, Stockholm, Sweden, 190-193, (June 1995)
Yamanashi, H., et al., "Deposition of Silicon Compound Thin Films in DC Discharge Plasma Using Hydrogen-Hexamethyldisilane Gas Mixture", <u>Proc.: Int. Symp. on Surfaces and Thin Films of Electronic Materials. Bull. of the Res. Institute of Electronics, Shizuoka University</u> , 30, 95-98, (1995)
Ye, Q., et al., "Resonant Tunneling via Microcrystalline-silicon quantum confinement", <u>Physical Rev. B</u> , 44, 1806-1811, (1991)
Yee, A., et al., "The Effect of Nitrogen on Pulsed Laser Deposition of Amorphous Silicon Carbide Films: Properties and Structure", <u>J. Materials Research</u> , 11, 1979-1986, (1996)
Yoder, M., "Wide Bandgap Semiconductor Materials and Devices", <u>IEEE Transactions on Electron Devices</u> , 43, 1633-1636, (October 1996)

Examiner

Date Considered

*Information Disclosure Statement Form (PTO-1449)

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OTHER DOCUMENTS
 (Including Author, Title, Date, Pertinent Pages, Etc.)

Examiner Initial	
	zhao, X., et al., "Nanocrystalline Si: a material constructed by Si quantum dots", <u>1st Int. Conf. on Low Dimensional Structures and Devices, Singapore, 467-471, (1995)</u>
	zirinsky, S., et al., "Electrical Resistivity of Amorphous Silicon Resistor Films", <u>Extended Abstracts of the Spring Meeting of the Electrochemical Society, Washington, DC, pp. 147-149, (1971)</u>

Examiner	Date Considered
----------	-----------------

*Substitute Disclosure Statement Form (PTO-1449)

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